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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,187	10/31/2000	Avraham Leff	YOR920000470US1	7447

7590 05/14/2004

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EXAMINER	
WON, MICHAEL YOUNG	
ART UNIT	**PAPER NUMBER**
2155	7

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/703,187	Applicant(s) LEFF ET AL.	
	Examiner Young N Won	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 12-14 and 21-23 have been amended. Claims 1-31 have been re-examined and are pending with this action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 9-15, 20-24, and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Butterworth et al. (US 5457797 A).

INDEPENDENT:

As per claims 1 and 30, Butterworth teaches a method and an article of manufacture comprising a machine-readable medium containing one or more programs which when executed implements the method, for use in a client/server environment of generating a user-interactive application that is dynamically partitionable when deployed in the client/server environment (see abstract and col.5, lines 9-55), the method and article of manufacture comprising the steps of: specifying that access to a model

associated with the user-interactive (see col.4, lines 40-42 & 53-56) application be performed through an application programming interface (see col.6, line 54) permitting location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of model storage (see col.6, lines 49-53 and col.15, lines 4-23) on the client and the server (see col.6, lines 44-49); and specifying that access to view generating logic associated with the user-interactive application (see col.9, lines 44-47 and col.15, lines 43-45) be performed through an application programming interface (see col.6, line 54) permitting location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of view elements (see col.22, lines 10-16 and 23-25) on the client and the server (see col.6, lines 44-49).

As per claims 11 and 20, Butterworth teaches of an apparatus for deploying a user-interactive application in a client/server environment, the apparatus comprising: a server and a client device (see col.6, lines 44-49) having at least one processor (implicit) operative to execute at least a portion of the user-interactive (see col.4, lines 40-42 & 53-56) application, wherein the user-interactive application: (i) specifies that access to a model associated with the user-interactive application be performed through an application programming interface (see col.6, line 54) permitting location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of model storage (see col.6, lines 49-53 and col.15, lines 4-23) on a client device and the server (see col.6, lines 44-49); and (ii) specifies that access to view generating logic associated with the user-interactive application (see col.9, lines 44-47 and col.15, lines 43-45) be performed through an application programming

interface (see col.6, line 54) permitting location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of view components (see col.22, lines 10-16 and 23-25) on the client device and the server (see col.6, lines 44-49).

As per claim 29, Butterworth teaches of a network-based system: a server (see col.6, lines 44-49) having at least one processor (implicit) responsive to a user-interactive application (see col.4, lines 40-42 & 53-56); and a client device (see col.6, lines 44-49) having at least one processor (implicit) responsive to the user-interactive application (see col.4, lines 40-42 & 53-56); wherein the user-interactive application: (i) specifies that access to a model associated with the user-interactive application be performed through an application programming interface (see col.6, line 54) permitting location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of model storage (see col.6, lines 49-53 and col.15, lines 4-23) on the client device and the server; and (ii) specifies that access to view generating logic associated with the user-interactive application (see col.9, lines 44-47 and col.15, lines 43-45) be performed through an application programming interface (see col.6, line 54) permitting location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of view components (see col.22, lines 10-16 and 23-25) on the client device and the server.

As per claim 31, Butterworth teaches a method for use in a computing device environment of generating a user-interactive application that is dynamically partitionable when deployed (see abstract and col.5, lines 9-55), the method comprising the steps of:

providing an application programming interface such that access to a model associated with the user-interactive application is performed through the application programming interface (see col.6, line 54), and wherein the application programming interface permits location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of model storage (see col.6, lines 49-53 and col.15, lines 4-23) in accordance with execution of the user-interactive application (see col.4, lines 40-42 & 53-56); and providing an application programming interface such that access to view generating logic associated with the user-interactive application (see col.9, lines 44-47 and col.15, lines 43-45) is performed through the application programming interface (see col.6, line 54), and wherein the application programming interface permits location-independent allocation (see col.5, lines 36-41; col.6, lines 42-49; and col.9, lines 33-35) and access of view components (see col.22, lines 10-16 and 23-25) in accordance with execution of the user-interactive application (see col.4, lines 40-42 & 53-56).

DEPENDENT:

As per claim 2, Butterworth further teaches wherein at least one of the application programming interface associated with the model and the application programming interface associated with the view generating logic comprises a process to create one or more elements (see col.5, lines 45-48).

As per claim 3, Butterworth further teaches wherein at least one of the application programming interface associated with the model and the application

programming interface associated with the view generating logic comprises a process to query one or more elements (see col.2, lines 31-35).

As per claim 4, Butterworth further teaches wherein at least one of the application programming interface associated with the model and the application programming interface associated with the view generating logic comprises a process to delete one or more elements (see col.8, lines 38-40).

As per claim 5, Butterworth further Butterworth teaches wherein at least one of the application programming interface associated with the model and the application programming interface associated with the view generating logic comprises a process to read at least one of a property and a state associated with one or more elements (see col.1, lines 61-66).

As per claim 6, Butterworth further teaches wherein at least one of the application programming interface associated with the model and the application programming interface associated with the view generating logic comprises a process to update at least one of a property and a state associated with one or more elements (see col.1, lines 11-14).

As per claims 9 and 10, Butterworth further teaches wherein the application programming interface associated with the model and the view generating logic has a structured lifecycle associated therewith (see Fig.16 and col.16, lines 25-36).

As per claims 12 and 21, Butterworth further teaches wherein the model and a controller logic associated with the user-interactive application execute on the server

and at least one view generated by the view generating logic is rendered on the client device (see col.15, lines 17-19).

As per claims 13 and 22, Butterworth further teaches wherein a controller logic associated with the user-interactive application executes on the client device (see col.9, lines 22-26).

As per claims 14 and 23, Butterworth further teaches wherein a controller logic associated with the user-interactive application executes on the server (see col.9, lines 22-26).

As per claims 15 and 24, Butterworth further teaches wherein the client device comprises a web browser (see col.19, lines 22-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 7, 8, 19, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butterworth et al. (US 5457797 A) in view of Hitchcock et al. (US 6345278 B1).

As per claims 7 and 8, Butterworth does not explicitly teaches wherein the one or more model elements and one or more view elements associated with the user-interactive application are individually identifiable by respective associated keys. Hitchcock teaches wherein the one or more model elements and one or more view elements associated with the user-interactive application are individually identifiable by respective associated keys (see col.17, lines 51-54). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Hitchcock within the system of Butterworth by implementing keys to identify elements associated with user-interactive applications within the client/server environment of generating a user-interactive application method because Butterworth teaches that "the application administrator will identify a specific environment for the application program" and "each object is assigned to a partition and each partition is assigned to a target computer" (see col.5, lines 16-22) thus there is clearly a means of associating objects to devices and it's associated application programs.

As per claims 19 and 28, Butterworth does not explicitly teach wherein the view generating logic renders a view in Hyper Text Markup Language. Hitchcock teaches wherein the view generating logic renders a view in Hyper Text Markup Language (see col.4, lines 1-6). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Hitchcock within the system of Butterworth by implementing Hyper Text Markup Language for the view generating logic within the client/server environment of generating a user-interactive application method because Butterworth teaches of a browser (see col.19, lines 22-25) and browsers are

well known in the art of transferring and receiving information written in HTML via the Internet.

4. Claims 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butterworth et al. (US 5457797 A) in view of Banthia (US 5922044 A). Butterworth does not explicitly teach wherein the client device comprises a personal digital assistant. Banthia teaches wherein the client device comprises a personal digital assistant (see col.1, lines 31-42). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Banthia within the system of Butterworth by implementing client devices comprising a personal digital assistant within the client/server environment of generating a user-interactive application method because Butterworth teaches of "object-oriented program across multiple computing devices" (see col.1, lines 11-14) and PDA are computing devices that can employ object-oriented processing as taught by Banthia.

5. Claims 17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butterworth et al. (US 5457797 A) in view of Yamamoto et al. (US 6275790 B1).

As per claims 17 and 26, Butterworth further teaches wherein the view components encapsulates (see col.17, lines 36-43), but he does not explicitly teach of Java Swing components. Yamamoto teaches of Java Swing components (see col.7, lines 42-44). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Yamamoto within the system of

Butterworth by implementing Java Swing within the client/server environment of generating a user-interactive application method because Java is a well-known and widely implemented object-oriented programming language and Butterworth teaches of "object-oriented program across multiple computing devices" (see col.1, lines 11-14), therefore by employing this well-known method and means enables the system to be quickly and efficiently employed.

As per claims 18 and 27, Butterworth teaches wherein elements associated with the model encapsulates, but he does not explicitly teach of EntityBeans of an Enterprise JavaBeans architecture. Yamamoto teaches of EntityBeans of an Enterprise JavaBeans architecture (see col.2, line 65 to col.3, line3 and col.5, lines 62-65). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Yamamoto within the system of Butterworth by implementing EntityBeans of an Enterprise JavaBeans architecture within the client/server environment of generating a user-interactive application method because Java is a well-known and widely implemented object-oriented programming language and Butterworth teaches of "object-oriented program across multiple computing devices" (see col.1, lines 11-14), therefore by employing this well-known method and means enables the system to be quickly and efficiently employed.

Response to Arguments

6. Applicant's arguments filed March 15, 2004 have been fully considered but they are not persuasive. See reasons below.

In regards to the arguments of claim 1 and similarly to claims 11, 20, 29, 30, and 31, Butterworth clearly teaches of the recited limitations in the claim (see claim rejections above). Additional reference locations and/or new reference locations have been provided to better clarify the interpretation of Butterworth's teachings.

An application programming interface is an application program that accesses operating system and other services. An API is defined at source code level and provides a level of abstraction between the application and the kernel (or other privileged utilities) to ensure the portability of the code. An API can also provide an interface between a high level language and lower level utilities and services which were written without consideration for the calling conventions supported by compiled languages. In this case, the API's main task may be the translation of parameter lists from one format to another and the interpretation of call-by-value and call-by-reference arguments in one or both directions. [http://foldoc.doc.ic.ac.uk/foldoc/foldoc.cgi?API]

Therefore, API is a code or program, which is not a patentable limitation.

For at least the reasons stated above, all dependent claims remain rejected.

Conclusion

7. The element of an API is implicit and Butterworth teaches of the functional aspects of each element.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Young N Won whose telephone number is 703-605-4241. The examiner can normally be reached on M-Th: 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T Alam can be reached on 703-308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Young N Won

May 4, 2004

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER